

**What is West Nile virus?**

West Nile virus is a virus that is carried by mosquitoes. It can cause disease in humans and animals. The virus was found in the U.S. in 1999 and in Utah in August 2003.

**How do people get West Nile virus?**

- The most common way is through the bite of an infected mosquito
- Blood transfusion or transplant (very rare)
- Mother to baby (extremely rare and no baby has died)
- Lab workers through a needlestick (bird sample not human)

**Who gets West Nile virus?**

Anyone who is bitten by an infected mosquito can get the disease. Elderly persons or those with poor immune systems are more likely to develop a serious illness if they are infected.

**What are the symptoms of West Nile virus?**

Most people will not even know they are infected. It is estimated that 20% of the people who become infected will develop mild symptoms, called West Nile fever. These people may feel like they have the flu and have a fever, body aches, and possibly a rash. Of those that become sick, 1 in 150 will go on to have the more severe form of the disease. They may have a stiff neck, and muscle weakness, and they may become disoriented. Such people may have seizures, go into a coma, and, in rare occasions, may die. People over the age of 50 are at highest risk of getting the severe infection.

**How soon do symptoms appear?**

Generally, symptoms occur 6 days later. But symptoms can appear between 3 and 15 days after mosquitoes bite people.

**How does the disease spread?**

Wild birds can carry West Nile virus, and the virus is spread to birds by mosquitoes. Infected mosquitoes can give West Nile virus to humans or other animals while biting them.

**Can you get West Nile virus from another person?** No. There is no proof that West Nile virus can be passed between humans or from other animals.

**If bitten by a mosquito, should I be tested for West Nile virus?** No. People rarely become sick from a mosquito bite. However, people with a high fever, severe headache, and muscle weakness or confusion should see a doctor immediately. People with flu-like symptoms are likely to recover completely and do not need to visit a doctor. Even in areas where mosquitoes carry the virus, very few mosquitoes are infected. The chance that one mosquito bite will be from an infected mosquito is very small.

**Can West Nile virus be transmitted through blood transfusions?** Yes, but it occurs rarely. Blood banks are now screening blood to make sure that it does not contain the virus.

**I am pregnant. If I get West Nile virus, is my baby at risk?** In the United States, there has only been one case where a mother gave her baby West Nile virus. Experts don't yet know how much risk there is to an unborn baby. Pregnant women should try to avoid infection by wearing protective clothing and using repellents containing DEET. Pregnant women who become sick with a high fever and stiff neck should see their doctor as soon as possible.

**Is there a vaccine for West Nile virus?** There is no vaccine for West Nile virus at this time.

**What is the treatment for West Nile virus?** There are no antibiotics or human vaccine for West Nile virus so it is very important to prevent infection. Mild cases of West Nile virus infection often require no treatment at all. More severe cases may require hospitalization. The treatment for WNV infection consists of treating the symptoms, not the disease.

**What can be done to prevent West Nile virus?** It is important to protect yourself from mosquitoes:

Between dusk and dawn:

- o Wear long pants and long-sleeved shirts when outside.
- o Apply mosquito spray to exposed skin and clothing when outside
  - o Adults use DEET at 30-35% concentration
  - o Children (between 2 months and 12 years) use less than 10% concentration
  - o Do not use DEET on children under 2 months old.
- o Make sure screen doors and window screens are in good condition.
- o Eliminate standing water sources around housing areas (i.e., water in old tires, cans, birdbaths, poorly kept swimming pools, etc.).
- o Keep weeds and tall grass cut short; adult mosquitoes look for these shady places to rest during the hot daylight hours.
- o Use mosquito netting or a screened tent when sleeping outdoors.

Prevention efforts may be taken in communities where mosquitoes are a concern. These may include:

- o Spraying of pesticides
- o Elimination or draining of places where mosquitoes live and breed
- o Other use of pesticides to kill mosquitoes

**Why should I use a mosquito repellent that contains DEET?** DEET is the most effective insect repellent available. The more DEET an insect repellent contains, the longer it will protect you. A higher percentage of DEET does not mean it will protect you better, just that it will last longer. However, DEET concentrations higher than 50% do not increase the length of protection. For

example, a product containing approximately 24% DEET provides about 5 hours of protection.

**Is DEET safe?** Yes, products containing DEET are very safe when used according to the directions. Always follow these steps:

- o Use enough repellent to cover exposed skin or clothing. Don't apply repellent to skin that is under clothing. Heavy application is not necessary to achieve protection.
- o Do not apply repellent to cuts, wounds, or irritated skin.
- o After returning indoors, wash treated skin with soap and water.
- o Do not spray aerosol or pump products in enclosed areas.
- o Do not apply aerosol or pump products directly to your face.
- o Spray your hands and then rub them carefully over the face, avoiding eyes and mouth.

See <http://npic.orst.edu/factsheets/DEETgen.pdf> for more information.

**Should pregnant or nursing women use DEET?** Women who are pregnant or nursing can use DEET. Be sure to follow the directions carefully.

**I like to do outdoor activities. Am I at greater risk for West Nile virus?**

Outdoor activities are an important part of a healthy lifestyle. Just because West Nile virus is in Utah does not mean that people should stay indoors! You can easily protect yourself from West Nile virus and continue to enjoy the outdoors.

- Use mosquito spray when doing any outdoor activity - especially when fishing, camping, or boating at night.
- Keep window screens on campers, tents, and boats "bug-tight".
- Keep campsites neat
- Get rid of mosquito breeding sites. (Electric "bug zappers" do not help since they usually attract more mosquitoes than they kill.)

**Are hunters who field dress wild game birds at risk for West Nile virus?**

There is no evidence that West Nile virus can be transmitted directly from birds or mammals to humans through direct blood contact. However, hunters are always urged to take proper precautions and wear rubber gloves when field dressing game.

**Can a person get West Nile virus by eating infected game birds?**

Proper cooking kills the virus. There is most likely no danger associated with eating well-cooked wild game that might be infected.

**Where can I get more info?**

Your personal health care provider. Your local health department, listed in your telephone directory or the Utah Department of Health, Office of Epidemiology (801) 538-6191.